



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,119	06/11/2007	Lin Zhi	33310.01112.US02/1112US	1033
13565 7590 10/14/2011 McKenna Long & Aldridge LLP 4435 Eastgate Mall Suite 400 San Diego, CA 92121				
EXAMINER				
CHANDRAKUMAR, NIZAL S				
ART UNIT		PAPER NUMBER		
1625				
MAIL DATE		DELIVERY MODE		
10/14/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,119

Applicant(s)

ZHI ET AL.

Examiner

NIZAL CHANDRAKUMAR

Art Unit

1625

Period for Reply -- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-17, 19-25, 27-35, 62-68, 70, 72-78 and 82-86 is/are pending in the application.
- 5a) Of the above claim(s) 70 and 72-77 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-17, 19-25, 27-35, 62-68, 78 and 82-86 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/23/2011
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Applicants response filed 9/23/2011 is acknowledged.

Formal matters:

The **finality** of the previously presented rejection is **withdrawn** consistent with papers filed 5/18/2011.

Claims 1-17, 19-25, 27-35, 62-68, 70, 72-78, 82-86 are in the case.

Election/Restrictions:

1-17, 19-25, 27-35, 62-68, 78, 82-86 are under Examination consistent with the following

Applicant is reminded of page 4 of office action filed

11/03/2010:

Claims 1-25, 27-35, 62-68, 78, 82 are examined to the extent that they read on the elected subject matter:

CRARB. compounds of formula II wherein n is 0, Z is

**Applicant is reminded of the reminder on page 2 of
office action filed 4/15/2011.**

**Examination of the claims 1-17, 19-25, 27-35, 62-68, 78, 82-86 is
limited to the compounds of formula II wherein n is 0 and Z is
CRARB.**

Claims 70, 72-77 remain withdrawn.

Response to Applicants' Remarks:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Previously presented anticipatory rejections are withdrawn in view of amendments to claims, except for the rejection as being anticipated by Yamada et al. WO 2001083460.

Applicants Remarks were fully considered but are not persuasive. Applicant's remarks appear to involve typographical and or factual errors. Previously rejection was based on the disclosure of compound RN 372117-90-3 by Yamada et al.

1. The pictured structure on applicants Remarks numbered page 19, line 9, is not the structure which the rejection is based on.

2. The correct structure appears on applicant Remarks numbered page 21, at about the middle of the page. The discussions, however end as

Therefore, Sues *et al.* does not anticipate any
of claims 1-25, 27-29, 62-70, 72-78 and 82.

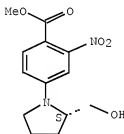
and

Claim 34 ultimately depends from claim 30. Therefore, Sues *et al.* does not anticipate claim 30 or 34.

Examiner's analysis of Yamada et al. compounds is shown below:

Claims 1, 8-16, 19-25, 27, 63-68, 78, 82, 83, 85 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. WO 2001083460.

Yamada et al. teach RN 372117-90-3



corresponds to compounds of formula II

R1 CORA wherein RA is heteroalkyl (Specification page 16, line 24 for applicants definition of the term "heteroalkyl" refers to a group containing an alkyl and one or more heteroatoms; Recitation of hydroxyC1-C6alkyl and C1-C6alkylsilyloxy C1-C6alkyl for the R9 possibility of dependent claim 22 is consistent with applicants definition of heteroalkyl. As such the interpretation of RA as an heteroatom containing alkyl chain O-CH3 for optionally substituted alkyl is consistent with the said applicant's definition).

R2 is NO2

R3, R4 and R5 are hydrogens

RA and RB are hydrogens for CRARB

R9 is hydrogen or hydroxyalkyl (substituted alkyl)

Note with regards to claims 63-68: The claims are ultimately drawn to compounds. The intended use is not given patentable weight. In the alternate, a compound and its properties are inseparable.

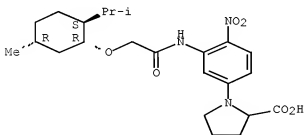
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-17, 19-25, 27-35, 62-68, 78, 82-86 rejected under 35 U.S.C. 102b as
being anticipated by Ye et al. *Bioorganic & Medicinal Chemistry Letters* (2003), 13(19),
3361-3365.

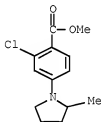


R1 is NO₂, RA is substituted heteroalkyl, rest of the R groups are hydrogens and or make pyrrolidine-carboxylic acid (compare specific compound claim 83).

(Specification page 16, line 24 for applicant's definition of the term "heteroalkyl" refers to a group containing an alkyl and one or more heteroatoms; Recitation of hydroxyC1-C6alkyl and C1-C6alkylsilyloxy C1-C6alkyl for the R9 possibility of dependent claim 22 is consistent with applicant's definition of heteroalkyl. As such the interpretation of RA as an heteroatom containing alkyl chain for optionally substituted alkyl is consistent with the said applicant's definition).

Claims 1, 8-17, 19-21, 24, 25, 27, 63-68, 78, 82, 83, 85 rejected under 35 U.S.C. 102b as being anticipated by Koshio et al WO 2003042181.

Koshio et al. teach RN 530091-52-2



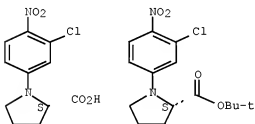
R1 is CORA wherein RA (OCH3) corresponds to heteroalkyl wherein the hetero is oxygen.

(Specification page 16, line 24 for applicant's definition of the term "heteroalkyl" refers to a group containing an alkyl and one or more heteroatoms; Recitation of hydroxyC1-C6alkyl and C1-C6alkylsilyloxy C1-C6alkyl for the R9 possibility of dependent claim 22

is consistent with applicant's definition of heteroalkyl. As such the interpretation of RA as an heteroatom containing alkyl chain O-CH₃ for optionally substituted alkyl is consistent with the said applicant's definition).

Claims 1-4, 6, 8-16, 19-20, 23, 24, 25, 27, 28, 30-35, 63-68, 78, 82, 83, 85 rejected under 35 U.S.C. 102b as being anticipated by Ahmad et al. WO 2001027107

Ahmad et al. teach RN 230642-98-5 RN 230642-97-4



R1 is NO₂, R2 is Cl, rest of the R groups are hydrogens and or make pyrrolidine-carboxylic acid/ester (compare specific compounds of claim 83).

Likewise,

Claims 83-85 are rejected under 35 U.S.C. 102b as being anticipated by

Yoshino et al. Technology Reports of the Osaka University (1990),

40(1986-2003), 81-5. STN Abstract is provided.

Yoshino et al. teach RN 129297-51-4 the last listed compound of instant claim 85.

Claim Rejections - 35 USC § 112

Amendments to claims overcome the previously presented rejection under 112 second paragraph.

New Rejection:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 62, first compound lacks antecedent basis.

Objection: The scope of formula (II) of independent claims 1 and 83 is drawn to different Markush structures.

Election/Restrictions

Applicant is reminded of page 4 of office action filed

11/03/2010:

Claims 1-25, 27-35, 62-68, 78, 82 are examined to the extent that they read on the elected subject matter:

compounds of formula II wherein n is 0, Z is CRARB.

Applicant is reminded of the reminder on page 2 of office action filed 4/15/2011.

Examination of the claims is limited to the compounds of formula II wherein n is 0 and Z is CRARB.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAL CHANDRAKUMAR whose telephone number is (571)272-6202. The examiner can normally be reached on 8.30 AM - 4.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571 0272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nizal S Chandrakumar/
Primary Examiner, Art Unit 1625